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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,272	09/15/2003	Lelia Cosimbescu	85025AEK	9023

7590 10/06/2005  
Paul A. Leipold  
Patent Legal Staff  
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EXAMINER

GARRETT, DAWN L

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/662,272

Applicant(s)

COSIMBESCU ET AL.

Examiner

Dawn Garrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-22 is/are pending in the application.
- 4a) Of the above claim(s) 11,13 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,12,14 and 16-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9-15-03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

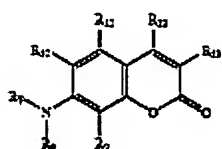
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**DETAILED ACTION*****Response to Amendment***

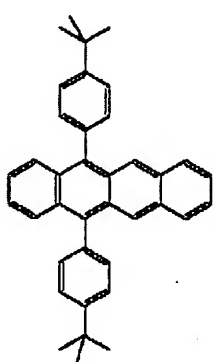
1. This Office action is responsive to the amendment and declaration under rule 131 filed August 4, 2005. Claims 1, 12, 16, and 17 have been amended. Claim 2 is canceled. Claims 1 and 3-22 are pending. The species under consideration are the following (see prior Office action):

Host: Aluminum trisoxine alone

First Dopant: Formula 2



Second Dopant: Inv-1b



Applicant has previously indicated claims 1-10, 12, 14, and 17-22 read on the selections. Claims 11, 13, and 15 are withdrawn as non-elected claims. In view of the amendment to claim 16, this claim is now under consideration. The status identifier "withdrawn" should be used to describe withdrawn claims, but has not been used in the amendment dated August 4, 2005.

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2. The objection to the drawing set forth in the last Office action (mailed April 6, 2005) is withdrawn in light of applicant's discussion of MPEP 608.02 regarding drawings containing only a single view.

3. The amendment to the specification is acknowledged.

4. The objection to claim 12 set forth in the last Office action, paragraph 4, is withdrawn due to the amendment.

5. The rejection of claim 16 under 35 USC 112, second paragraph, is withdrawn due to the amendment adding the structural formulas of Inv-1a, Inv-6a, and Inv-8a.

6. Claims 1, 3-10, 12, 14, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsujioka et al. (WO 02/100977) (cited by applicant, hereinafter WO '977). WO '977 discloses electroluminescent devices comprising a luminescent layer comprised of a host and two dopants (see abstract). WO '977 discloses Alq as a host material (see page 69, compound 24 and Table on page 104). WO '977 further teaches dopant "DtBuPN", which is the same as applicant's Inv-1b (see page 45, compounds A4 and example 1, Table 1, page 73). Also, coumarin type derivatives are taught as dopants (see pages 71 and 72). Although WO '977 does not appear to set forth an example with all three of Alq3, DtBuPN, and a coumarin derivative, it would have been obvious to one of ordinary skill in the art to have made a device comprising these three components, because WO '977 teaches all of these components for the luminescent layer. The table on page 104 shows the dopants are present in the luminescent layer in amounts of 2% and 5% per instant claims 4 and 5. Furthermore, the teaching of 2% in the example renders obvious 1% as set forth in claim 7, because it one of ordinary skill in the art at the time of the invention would have expected 2% and 1% to render similar results absent evidence

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otherwise. Because WO '977 teaches the same components as set forth in the claims, the emission of the WO '977 OLED is deemed to be within the range of values set forth in the claims.

***Response to Arguments***

7. Applicant's arguments filed August 4, 2005 have been fully considered but they are not persuasive.

Applicant has submitted a Declaration Under Rule 131 with the intent to show reduction to practice prior to December 19, 2002. The examiner submits that the declaration only shows reduction to practice of one embodiment comprising AlQ<sub>3</sub> host, quinacridone emitter and a naphthacene stabilizer. Applicant has not shown reduction to practice of a device comprising AlQ<sub>3</sub> host, coumarin emitter ("Formula 2"), and a naphthacene stabilizer. It is this combination of host and dopants which was considered and rejected over the WO '977 reference in the last Office action. Accordingly, the rejection over WO '977 is maintained.

With regard to applicant's arguments that "the WO reference appears directed to improving the luminance and luminance efficiency of red and orange color", the examiner submits that no specific color requirements have been specified in claim 1 other than a green emitting material (coumarin derivative) is claimed. The materials disclosed by WO '977 are the same as those required by applicant and the emitting property of each material is considered to be an inherent property.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571)272-1523. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached at (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dawn Garrett  
Primary Examiner  
Art Unit 1774

September 30, 2005